

Diagnostic Characters of Undescribed Cossonidæ. No. 1.

By T. VERNON WOLLASTON, M.A., F.L.S.

FAMILY COSSONIDÆ.

(SUB-FAMILY PENTARTHRIDES.)

(*Sectio a et subsectio bb.*) *Oculis scutelloque distinctis.*

GENUS MESOXENOPHYSIS. (*Nov. gen.*)

Corpus minutum, fusiforme, angustum, nitidum, calvum, clare pallido-castaneum; *capite* subgloboso, *rostro* longiusculo, graciusculo, parallelo (aut postice etiam subgraciliore), *oculis* parvis, demissis, superioribus (i.e. supra haud latissime separatis); *prothorace* regulariter ovali (sc. in medio rotundato, antice et postice æqualiter angustiore), convexo, antice integro (nullo modo etiam obsolete constricto); *scutello* distincto, rotundato; *elytris* fusiformibus basi truncatis, convexis; *metasterno* breviusculo; *abdominis* segm. 1mo et 2do inter se omnino suffusis (vix obsolete separatis). *Antennæ* longiusculæ, graciunculæ, mox ante medium rostri insertæ; *funiculi* (5-articulati) art. 2do sequentibus sensim longiore; *capitulo* magno, elongato. *Pedes* longiusculi, crassiusculi; *tarsis* art. 1mo vix elongato, 3tio multo latiore et profunde bilobo.

A *Mesoxenus* (i.e. *Amaurorrhinus*), et *φασίς*, *aspectus*.

Obs.—Genus corpore fusiformi calvo, rostro graciusculo, oculis subapproximatis, antennis longiusculis subgracilibus, tarsorumque art. 3tio profunde bilobo *Microtribo* (Novæ Zealandiæ) simillimum; sed scutello conspicuo (nec obsolete), oculis omnino demissis ac minus grosse granulatis, prothorace antice nullo modo constricto, funiculo minus laxo, capitulo minus abrupto, coloreque pallido, inter alia, facile distinguitur. A *Sericotrogo* differt corpore calvo et magis fusiformi, rostro antennisque gracilioribus, oculis subapproximatis demissis (nec late separatis prominentibus), prothoraceque integro.

The position of the present curious genus, which is founded upon a minute Cossonid detected by Captain Brown in New Zealand, and recently communicated to me by Dr. Sharp, appears to be amongst those particular types of the *Pentarthrides* in which the eyes and scutellum are developed, and the body is free from every trace of pubescence; for although *Scricotrogus* is the form near which I should be inclined to place it, I may add that the coarse decumbent fulvescent hairs with which that singular little insect is sparingly clothed is altogether *exceptional* in the groups with which it is associated. Were it not however for the existence of a scutellum I would rather have put *Mesoxenophasis* alongside *Microtribus*,—which is equally peculiar (like *Scricotrogus*) to New Zealand, and with which in its exceedingly fusiform, medially-divided outline, comparatively slender rostrum and antennæ, subapproximated eyes, and bald surface it better agrees; nevertheless the total want of a scutellum in that genus throws it in reality into a different section of the subfamily.

In its minute size and pallid hue, as well as in its very oval, anteriorly unconstricted prothorax, and in the fact of its first and second abdominal segments being completely suffused *inter se*, *Mesoxenophasis* (which *primâ facie* has much the appearance of a very diminutive *Amaurorrhinus*, or *Mesoxenus*) presents a combination of characters which will still further tend to separate it from its immediate allies.

Mesoxenophasis Brouni, n. sp.

M. fusiformis, angustus, nitidus, calvus, clare pallido-castaneus; rostro (subgracili, subparallelo) parce sed distincte punctulato; capite convexo et antice minute foveolato; prothorace regulariter ovali (in medio sc. rotundato, antice et postice aequaliter angustiore), convexo, antice truncato et integro (nullo modo constricto), ubique parce et leviter punctulato; elytris ellipticis, convexis, grosse substriato-punctatis; antennis pedibusque vix obscurioribus, illarum capitulo sensim nigrescentiore. Subtus parcellissime punctatus (punctis maximis in sternis sed in abdomine minutissimis, fere obsoletis).

Long. corp. lin. $1\frac{1}{4}$ — $1\frac{1}{3}$.

Habitat Novam Zealandiam, a Dom. Sharp ad describendum benigne communicatus.

In honorem Dom. Broun, scientiæ naturalis in Novâ Zealandiâ investigatoris, hanc speciem inter *Cossonidas* valde distinctam nuncupavi.

GENUS TYCHIODES.

Wollaston, *Trans. Ent. Soc., Lond.*, 16 (1873).

Tychiodes Jansoni, n. sp.

S. elliptico-oblongus, depressus, nitidus, piceo-niger: capite parvo, inter oculos parce punctato et ibidem minute foveolato; rostro elongato, gracillimo, parallelo, cylindrico, politissimo, fere impunctato (punctulis minutis solum parce irrorato); prothorace transverso, subrotundato-triangulari, parce sed distincte punctato, æquali (aut postice in medio obsolete transversim impresso); elytris parallelo-oblongis basi recte truncatis, grosse punctato (aut fere crenato-) sulcatis, interstitiis postice et versus latera convexis ac parce minutissimeque subseriatim punctulatis; antennis (gracilibus, longe pone medium rostri insertis) tarsisque clare rufo-ferrugineis, femoribus tibiisque robustis rufo-piceis. Subtus parce et sat minute punctulatus.

Long. corp. lin. 2.

Habitat ins. Philippine, a Dom. E. W. Janson communicatus, cujus in honorem nomen triviale dedi.

Obs.—Species *T. Adamsi*, insularum Japonicarum, valde affinis; sed differt corpore paululum majore, depressiore, vix magis parallelo, et conspicue obscuriore (sc. fere nigro); rostro vix longiore, ac sensim minute punctulato (nec omnino esculpturato); prothorace fere æquali, solum postice in medio obsolete transversim impresso; scutelloque submajore et magis pentagono.

Three examples of a Pentarthrid, which have been communicated to me by Mr. Janson as having come from the Philippine Archipelago, are most intimately related to the *Tychiodes Adamsi*—detected by Dr. A. Adams on the island of Awasima (off the north-west coast of Nipon) in the Japanese Group. Nevertheless, although belonging undoubtedly to the same type, I feel sure that it is distinct

as regards species,—being not only a trifle larger, and more parallel, than the *T. Adamsi*, but likewise a little more depressed, and of a conspicuously darker hue. Its rostrum moreover is, if anything, somewhat longer, and more appreciably (however minutely) punctulated; and its scutellum is perhaps a little longer, and more strictly *pentagonal* in outline.

(SUB-FAMILY COSSONIDES.)

GENUS HIMATIUM.

Wollaston, *Trant. Ent. Soc., Lond.*, 461 (1873).

Himantium variolosum, n. sp.

H. angustulum, sublineare, depressiusculum, opacum, piceo-nigrum, setulis grossis fulvo-cinereis subdemissis parce obsitum; capite fere ad oculos (demissos, subinferiores, late separatos) immerso; rostro angustulo, parallelo, profunde et inaequaliter punctato-rugoso; prothorace ovato-triangulari, antice conspicue constricto et ibidem in medio calvo ferrugineo, grosse sed haud profunde subreticulato-variolo (nec punctato); elytris (prothorace vix latoribus) parallelis, grosse punctato-striatis, interstitiis parce et minutissime subgranulatis; antennis tarsisque piceo-ferrugineis, femoribus tibiisque rufopiceis; tarsorum art. 3tio conspicue bilobo.

Long. corp. lin. circa 2.

Habitat Africam Australem (sc. Promont. Bonae Spei), a cl. E. W. Janson ad describendum missum.

Obs. A *H. pubescente* (e regione "Malabar") discedit corpore paulo majore, obscuriore, magis opaco, setisque robustioribus squamiformibus (nec pilis) pallidioribus obsito; prothorace grosse (sed haud profunde) subreticulato-variolo (nec punctato); tarsorumque art. 3tio latiore et multo evidentius bilobo.

Of the present well-defined *Himantium* three examples have lately been submitted to me by Mr. Janson; and the species which they represent is manifestly very distinct from the (South-Indian) *H. pubescens*,—not merely in its rather larger size, darker hue, and more opaque surface (which is sparingly clothed with thicker, paler, and

more *scale*-like setae), but likewise in its prothorax being (instead of sharply punctured) coarsely and irregularly, but not deeply, *variolose* and subreticulate, and in the third joint of its feet being wide and more cordate.

GENUS PHLÆOPHAGOSOMA.

Wollaston, *Trans. Ent. Soc., Lond.*, 23 (1873).

Phlæophagosoma thoracicum, n. sp.

P. parallelo-fusiforme, angustulum, subcylindricum, convexiusculum, nitidum, nigro-piceum elytris piceis; rostro longiusculo, parallelo, subarcuato, sat dense punctulato; oculis parvis sed prominentibus; prothorace (pone medium latitudine elytrorum) magno, elongato, triangulari-ovato, antice obsolete constricto, sat grosse sed vix dense punctato; elytris subcylindricis basi rectissime truncatis, profunde punctato-, aut fere subrenato-striatis, interstitiis subconvexis ac minutissime parcissimeque punctulatis; antennis pedibusque piceis.

Long. corp. lin. 2—2½

Habitat in Novâ Zeelandiâ, a Dom. Broun ad Dom. Sharp nuperrime missum.

Obs.—Species *P. corvino*, Novæ Zealandiæ, primâ facie similis; sed differt colore magis piceo (nec atro), prothorace majore sublatiore subremotius punctato et antice obsoletius constricto, oculis magis prominentibus, elytrisque profundius punctato-striatis necnon ad basin conspicue rectius truncatis.

The two examples from which the above diagnosis has been drawn out have recently been communicated by Dr. Sharp, who received them from Captain Broun in New Zealand; and the species which they represent is evidently much allied to the *P. corvinum*. It is, however, unquestionably distinct from the latter,—differing from it not merely in its more piceous hue, but likewise in its larger or somewhat more developed prothorax (which is more obsoletely constricted in front, and a trifle more remotely punctured), in its eyes (although small) being more

prominent, and in its elytra being more deeply punctate-striate, as well as more *straightly truncated* (or less bi-arcuate) at their base.

Phlæophagosoma dilutum, n. sp.

P. corvino affine, sed paulo minus et vix subangustius, colore minus nigro (in elytris etiam piceo-castaneo); rostro (præsertim antice) sensim sublatiore, et a fronte obsolete subdiviso; scapoque conspicue longiore, sc. paulo ultra apicem rostri currente.

Long. corp. lin. $1\frac{3}{4}$ — $2\frac{1}{4}$.

Habitat Novam Zealandiam, ab Auckland a Dom. Lawson missum, et a cl. D. Sharp ad describendum nuperrime communicatum.

The present *Phlæophagosoma* is very closely allied to the *P. corvinum* (likewise from New Zealand), but it appears to be altogether a little smaller and just appreciably narrower; and its colour (instead of being deep black) is dark-piceous, with the elytra piceo-castaneous. Its rostrum, too, in proportion to its size, is a trifle broader, and obsoletely impressed transversely between the eyes (causing it to appear obscurely subdivided, as it were, from the forehead); and its scape, which extends perceptibly beyond the apex of the rostrum, is more elongated.

Phlæophagosoma pedatum, n. sp.

P. præcedenti simile, sed paululum longius magisque parallelum (aut vix minus fusiforme), fronte distinctius foveolatâ, tarsorumque art. 3tio multo majore latiore et valde profunde bilobo.

Long. corp. lin. $2\frac{1}{2}$.

Habitat in Novâ Zealandiâ, una cum specie præcedenti ab Auckland a Dom. Lawson missum.

The above diagnosis is drawn out from a single example which has been communicated by Dr. Sharp as having been received from Auckland, in New Zealand, by Mr. Lawson; and, judging from the type now before me, the species would appear to be a trifle larger (and, in proportion to its size, just appreciably more parallel, or less fusiform) than the *P. dilutum*; its forehead, too, is more distinctly impressed with a central line, or fovea; and the third joint

of its feet is very much larger and wider, and (instead of being nearly simple) most deeply bilobed.

GENUS BOROPHLÆUS.

Wollaston, *Trans. Ent. Soc., Lond.*, 414 (1873).

Borophlæus Murrayi, n. sp.

B. angustulus, parallelus, nitidus, ater; rostro (breviusculo, latiusculo, fere parallelo, sc. postice paululum angustiore) profunde et rugose punctato, oculis subdemissis; prothorace subtriangulari-quadrato, antice distincte constricto, postice trisinuato, profunde, grossissime sed haud dense subæqualiter punctato (punctis postice in medio submajoribus); elytris grossissime punctato-sulcatis, interstitiis convexis et minute punctulatis; antennis tarsisque rufo-ferrugineis. Subtus parce, grosse et profunde punctatus; abdominis segmentis 1mo et 2do in medio longitudinaliter impressis; metasterno postice profunde canaliculato.

Fam? [vix species altera].—rostro subgraciliore et in medio transversim subgibboso; prothorace subdensius punctato, necnon (præsertim postice) evidenter carinulato.

Long. corp. lin. circa 3.

Habitat in sylvis proceris Californiæ, nuper detectus a cl. A. Murray—cujus in honorem nomen specificum proposui.

Obs.—*B. puncticollis*, Woll., in Mexico degenti, affinis, sed differt corpore majore et grossius sculpturato, oculis minus prominentibus, fronte multo minutius foveolatâ, scutello majore, interstitiis evidenter punctulatis, necnon antennis tarsisque conspiciue pallidioribus. *Cossono crenato*, Horn, e California et Oregon, simillimus, et forsan ejus varietas topographica; sed paululum major, rostro subbreviore, antice vix minus dilatato, punctis mediis ad basin prothoracis minus longitudinaliter dispositis, scutello vix magis rotundato, interstitiis sub-evidentius punctulatis, tibiisque nigrescentioribus.

The present *Borophlæus* has lately been communicated by Andrew Murray, Esq., by whom it was detected, only a few months ago, in the forests of California; and I have much pleasure in dedicating the species to its captor—whose interesting explorations across the Atlantic have

brought to light so many interesting facts. Although abundantly distinct specifically, it is closely allied to the *B. puncticollis*, Woll., from Mexico (and still nearer to the *Gossonus crenatus*, of Horn): but it is considerably larger and more coarsely sculptured, its eyes are less prominent, its frontal fovea is *very* much smaller, its scutellum is proportionately larger, its elytral interstices are more conspicuously (though minutely) punctulated, and its antennæ and feet are of a much paler hue,—being rufo, or piceo-ferruginous.

GENUS EUTORNUS.

Wollaston, *Trans. Ent. Soc., Lond.*, 491 (1873).

Eutornus congener, n. sp.

C. elongatus, parallelo-fusiformis, subcylindricus, nitidiusculus, rufo-ferrugineus sed antice et postice paululum obscurior; capite rostroque minute punctulatis et plus minus obsolete nigrescentioribus; prothorace elongato, cylindrico-ovato, antice profunde constricto, vix argutius punctulato; elytris subcylindricis (postice gradatim vix subattenuatis), striato-punctatis (striis versus suturam profundioribus), interstitiis depressis ac minutissime uniseriatim punctulatis, postice gradatim paulo nigrescentioribus; antennispedibusque crassiusculis, fere concoloribus.

Long. corp. lin. vix $2\frac{1}{2}$.

Habitat Malacca, in collectione E. W. Janson.

Obs.—*E. ferrugineo*, insularum Malayensium, valde affinis, sed vix (nisifallor) ejus varietas geographica; differt corpore submajore ac magis ferrugineo (sc. antice et postice minus obscurato), rostro paulo longiore latiore, antennispedibusque subcrassioribus, necnon tibiis ad angulum internum evidentius calcaratis.

The single example from which the above diagnosis is compiled has been forwarded to me by Mr. Janson as coming from Malacca; and it is very closely allied to the *Eutornus ferrugineus*, so widely spread over the islands of the Malayan archipelago, from which it appears mainly to differ in its (probably) rather larger size and more ferruginous hue (it being less darkened both before and behind), as well as by its rostrum being a little longer and

broad, its limbs a little thicker, and by the inner angle of its tibiae being produced into a somewhat more evident spinule.

Before closing this short paper, I may just mention that a considerable number of examples of my *Eutornus dubius* have lately been communicated by Dr. Sharp as having been received from New Zealand by Mr. Lawson, and that I am enabled consequently to correct the somewhat imperfect diagnosis of that Cossonid as given at p. 638 of my late paper in the Entomological Society's Transactions, and which was compiled from a single individual unusually small in stature and pale in hue. The following formula, therefore, will be found more nearly to characterize the species:—

Eutornus dubius.

E. elongatus, fusiformis, nitidiusculus, niger (interdum subpiceo-niger) sed in elytris (præsertim versus humeros) paululum dilutior aut picescentior; capite rostroque latis, crassis, punctulatis, illo convexo et valde exserto: prothorace elongato, ovato-cylindrico, antice profunde constricto, paulo grossius punctato; elytris subfusiformi-cylindricis, sat profunde striato-punctatis, interstitiis minutissime parvissimeque uniseriatim punctulatis; antennis piceo-ferrugineis; pedibus piceis. Subtus subalutaceus, parce punctatus.

Long. corp. lin. $1\frac{2}{3}$ — $2\frac{2}{3}$.

Habitat Novam Zeelandiam, a Dom. Lawson sat copiose repertus.

And I may likewise state that an example of a *Pentarthrum* has been received lately from New Zealand by Mr. Lawson which seems to differ in no respect from my *P. zealandicum* (*Trans. Ent. Soc. Lond.*, 598, 1873), except that its head and prothorax are a little more shining, its male rostrum is more deeply and sharply channeled, and its prothorax is obsoletely impressed in the centre behind. My belief is, that it represents a mere local state, or race, of that species; nevertheless I will propose for it the varietal

name of *canaliculatum*, in the event of future material proving it to be distinct. The following short formula may therefore be added to the diagnosis of the *P. zealandicum*, at p. 598 of my late paper:—

Pentarthrum zealandicum.

var. β . (*canaliculatum*). Capite prothoraceque paulo nitidioribus, rostro profundius argutiusque canaliculato, prothorace postice in medio subimpresso.
